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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/696,219	10/29/2003	Herbert H. Loeffler	1159.1009-007	5251
21005	7590	09/27/2006	EXAMINER	
HAMILTON, BROOK, SMITH & REYNOLDS, P.C. 530 VIRGINIA ROAD P.O. BOX 9133 CONCORD, MA 01742-9133			HYUN, PAUL SANG HWA	
			ART UNIT	PAPER NUMBER
			1743	

DATE MAILED: 09/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/696,219

Applicant(s)

LOEFFLER ET AL.

Examiner

Paul S. Hyun

Art Unit

1743

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 August 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4, 10, 12, 13 and 17-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 10, 12, 13, 17-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

REMARKS

Claims 1-4, 10, 12, 13 and 17-24 are pending. The amendments to claims 1, 13, 19 and 23 have been acknowledged. The claims now recite, in addition to other ~~amendments~~ ^{elements}, a member capable of opening a valve, and that the valve is capable of opening and closing. Consequently, the addition of these limitations has changed the scope of all pending claims.

Response to Amendment

The rejections of the claims under 35 USC § 112 cited in the previous Office action are withdrawn in light of the amendments.

The art rejections cited in the previous Office action are withdrawn in light of the amendments.

Claim Objections

Claim 18 is objected to because of the following informalities:

The limitation "a conduit" recited in line 2 of the claim should be changed to "the conduit" since a proper antecedent basis for the limitation has already been established in claim 13.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims **21-24** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 21 and 23 recite that the valve is positioned **at** the fluid port. The claims also recite that the valve comprises a flexible membrane that is positioned **below** the fluid port. The location of the valve with respect to the port is unclear.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims **1-4, 10, 12, 13 and 17-24** are rejected under 35 U.S.C. 103(a) as being unpatentable over Stapleton et al. (US 5,922,604) in view of Kath et al. (US 5,882,601).

Stapleton et al. disclose a device for conducting reactions (see Figs. 1-3). The device comprises a microscope slide 14 for supporting a sample, and a plurality of removable covers 12 clamped to the top surface of the microscope slide to form a plurality of reaction chambers 16 (see Fig. 4). Each cover comprises a conical reagent well 18 for receiving and holding fluid from a fluid delivery device, and a valve situated in port 20 of the reagent well (see lines 13-60, col. 13). The reference discloses that the valve may be either externally actuated or self-actuated (see line 14, col. 13).

The device disclosed by Stapleton et al. differs from the claimed invention in that the reference does not disclose the valve as recited in the claims. The reference also does not disclose an actuator capable of causing relative movement between the port and a conduit comprising a means to open a valve.

Kath et al. disclose an automated fluid dispenser and a reaction vessel having a port that is closed by a septum valve. Fluid is added to the reaction vessel by piercing the septum with a dispensing canula of the automated fluid dispenser (see lines 1-37, col. 1).

In light of the disclosure of Kath et al., it would have been obvious to one of ordinary skill in the art to provide a septum valve and an automated fluid dispenser comprising a canula in the port of the device disclosed by Stapleton et al. The septum valve would provide a means for introducing fluid into the device without contamination.

With respect to claims 3, 4 and 17, although neither references explicitly disclose a second fluid port or a second conduit, it would have been obvious to one of ordinary skill in the art to provide a second port and a second conduit to the modified device disclosed by Stapleton et al. and Kath et al. so that a second fluid can be introduced into chamber 16 without being contaminated by the fluid that was introduced via the first port.

Response to Arguments


Applicant's arguments with respect to the art rejections of the claims have been considered but are moot in view of the new grounds of rejection. The amendments to the claims changed the scope of the claims and necessitated new grounds of rejections.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul S. Hyun whose telephone number is (571)-272-8559. The examiner can normally be reached on Monday-Friday 8AM-4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill Warden can be reached on (571)-272-1267. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

PSH
9/15/06


Jill Warden
Supervisory Patent Examiner
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